

**Conference on Effectively Restoring Ecosystems
22-24 August 2000, St. Louis, Missouri**

BACKGROUND

Session: Breakout 3A

Topic: Monitoring and Adaptive Management of Restoration Projects

Presenters:

- Mark McKevitt, CECW-PC
- Steve Hudak, CECW-BE
- Jeff Laufle, CENWS
- Bill Hubbard/CENAE

Recorder: Michelle L. Clark, CESWG-PE-RE

Objective: Presentation and discussion of policies, procedures, possibilities, perceptions, and problems with monitoring and adaptive management of environmental restoration projects.

Description: Speakers provided attendees with an overview of Headquarters' environmental policy, the importance of CAP project review at all levels, and the steps involved in the technical review process. An open discussion followed the presentations.

HIGHLIGHTS

The Corps is involved in numerous restoration projects. Two important tools for determining the success of these projects are monitoring and adaptive management. Monitoring determines whether the project produces the benefits for which it was designed. The three types of monitoring for restoration projects are: O&M (cost is 100% non-Federal), Periodic (cost is 100% Federal), and Cost-Shared (cost is shared 65%/35%). Adaptive management is used to modify the original project using information gathered through monitoring. It is a four-step, continuous process of planning, acting, monitoring, and evaluating. It allows modification of a project as the project progresses, which increases the project's chances of success. Adaptive management also allows quicker start-up of a project because the number of preliminary studies is reduced (less up-front analysis while recognizing future risk and uncertainty). Successes using of the adaptive management technique include the Salt Marsh Restoration Projects at Galilee, RI and Sagamore, MA.

Questions and Answers:

Q: How do you build in funds for adaptive management?

A: GI projects – 216, deficiency corrections. CAP Projects – design deficiencies (limited by funds cap), open new CAP project to correct.

Q: What if the 1% cap for monitoring costs isn't enough? Ecological targets are scientifically based, and we need data to determine whether a system works.

A: That research is the job of the USFWS, state agencies, or the cost-sharing partners through O&M requirements of completed projects. Research is not included in monitoring. Adaptive management starts from the beginning of a project. A monitoring program is based on uncertainties and should be thought through early on. The sponsor should have a good idea of monitoring requirements by the time the project is complete.

Q: Is there a database to receive information gathered at these various projects (like a clearinghouse)?

That way we can learn from other successes and mistakes.

A: No, currently there is not a database. Possibly, we can look at the way the EPA does business and use something similar.

Q: Why does the Corps disown projects after final inspection?

A: Sponsors are responsible for O&M of completed projects. A requirement can be put into the O&M document for periodic Corps inspections.